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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,870	08/23/2001	Tony F. Rodriguez	P0392	1150
23735	7590	06/20/2006	EXAMINER	
DIGIMARC CORPORATION 9405 SW GEMINI DRIVE BEAVERTON, OR 97008			BROWN, CHRISTOPHER J	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/938,870	Applicant(s) RODRIGUEZ ET AL.	
	Examiner Christopher J. Brown	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11, 17 is/are allowed.
- 6) ☒ Claim(s) 12-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear how a printed watermark is a “digital” watermark. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 12 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Rhoads US 6,332,031

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claims 12 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Rhoads US 6,332,031.

As per claims 12, and 16 Rhoads teaches a method of detecting a first watermark from a substrate of the printed object, (Col 2 lines 47-55) Rhoads teaches detecting a second digital watermark from an image scanned from the printed object and using the relationship between the first and second objects to determine authenticity of the printed object, (Col 2 lines 55-65, Col 3 lines 45-65).

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12, 13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Furley GB 2346110A.

As per claims 12, and 16 Furley teaches a method of detecting a first and second watermarks from a substrate of the printed object, and detecting the second digital watermark from an image scanned from the printed object and using the relationship between the first and second watermarks to determine authenticity of the printed object, (page 4 paragraph 3, page 5 paragraph 6, page 9 paragraph 3).

As per claim 13, Furley teaches producing a watermark with varying topology (page 5 paragraph 6).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the

reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Claim 13 rejected under 35 U.S.C. 103(a) as being obvious over Rhoads US 6,332,031 in view of Crane US 4,552,617.

As per claim 13, Rhoads fails to teach producing a watermark with varying topology.

Crane teaches a watermark producing method that varies the topology of a watermark, (Col 3 line 67- Col 4 line 8).

It would have been obvious to one of ordinary skill in the art to modify the Rhoads with Crane’s varying topology because the process increases the security of the watermark.

Claim 14 is rejected under 35 U.S.C. 103(a) as being obvious over Rhoads US 6,332,031 in view of Aggarwal US 6,834,344.

As per claim 14, Rhoads does not teach using an invisible watermark.

Aggarwal teaches using an invisible watermark including printing and scanning, (abstract). It would have been obvious to one of ordinary skill in the art to use the invisible watermark with the system of Rhoads to enhance security and prevent certain parties from detecting the watermark.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoads US 6,332,031 in view of Brundage US 2002/016992.

As per claim 15, Rhoads does not teach using watermark data to align an optical scanner.

Brundage teaches using watermark data to align an optical scanner, [0007].

It would have been obvious to one of ordinary skill in the art to use the orientation data of Brundage with the watermark system of Rhoads because it allows the scanner to align itself without user interference.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 14 is rejected under 35 U.S.C. 103(a) as being obvious over Furley GB 2346110A in view of Aggarwal US 6,834,344.

As per claim 14, Furley does not teach using an invisible watermark.

Aggarwal teaches using an invisible watermark including printing and scanning, (abstract). It would have been obvious to one of ordinary skill in the art to use the invisible watermark with the system of Furley to enhance security and prevent certain parties from detecting the watermark.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furley GB 2346110A in view of Brundage US 2002/016992.

As per claim 15, Furley does not teach using watermark data to align an optical scanner.

Brundage teaches using watermark data to align an optical scanner, [0007].

It would have been obvious to one of ordinary skill in the art to use the orientation data of Brundage with the watermark system of Furley because it allows the scanner to align itself without user interference.

Allowable Subject Matter

4. The following is a statement of reasons for the indication of allowable subject matter:

As per claims 1 and 6, Wang US 6,263,086 (Wang 086) teaches embedding an invisible watermark in a halftone screen structure. (Col 1 lines 49-53, Col 2 lines 1-5). Wang does not teach errors when the screen is reproduced.

Adler teaches use of measuring the Strength of a fragile watermark for which any tampering of the image is detected through errors produced in the watermark (Col 2 lines 30-35).

However, neither Wang or Adler teach using an inherently unstable screen structure to detect reproduction errors.

As per claim 6, Adler teaches using the errors of the fragile watermark to detect reproduction, (Col 2 lines 30-35). Adler teaches printing digital files, see Figs 8-11.

However, neither Wang or Adler teach using an inherently unstable screen structure to detect reproduction errors.

Wang US 6,252,971 (Wang 971) teaches that reproduction of halftone structures produces distortion and non-uniformity, (Col 1 line 57- Col 2 line 10).

However Wang 971 teaches away from the instant application because it is attempting to solve the problem of distortion production and non-uniformity.

As per claim 17, Wang-Adler-Wang teaches printed watermarks but fails to teach a fiducial. Rhodes teaches use of fiducial marks to find a watermark (Col 57 line 57 – Col 58 line 2).

However Rhodes fails to teach using the fiducial in a comparative way to determine the authenticity of the watermark.

Claims 1-11, and 17 are allowed over the current art of record.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher J. Brown whose telephone number is (571)272-3833. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jaques Louis Jaques can be reached on (571)272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher J. Brown

6/14/06



JACQUES H. LOUIS-JACQUES
PRIMARY EXAMINER